

coupled to the vehicle body, and wherein, when receiving axial load, the crash box is plastically deformed to absorb the axial load; and

an initial buckling portion, which is previously formed in the crash box close to one of the first and second ends, wherein plastic deformation of the crash box due to axial load starts at the initial buckling portion and progresses toward the other one of the first and second ends from the initial buckling portion so that part of the crash box having no initial buckling portion is gradually deformed.

Kindly add the following new Claims 9-19.

-- 9. (New) The bumper according to claim 2, wherein the crash box has sides and ridgelines, each ridgeline being defined by adjacent pairs of sides and extending in an axial direction of the crash box, wherein the initial buckling portion extends along an entire circumference of a predetermined portion in the axial direction of the crash box so that the initial buckling portion is formed not only on the sides but also on the ridgelines, and wherein the initial buckling portion includes projections and recess which are smoothly connected to the part of the crash box that has no initial buckling portion.

10. (New) The bumper according to claim 2, wherein the crash box has a substantially rectangular cross-section.

11. (New) The bumper according to claim 2, wherein the initial buckling portion is a plastically deformed portion that is formed by applying an axial load to material forming the crash box.

12. (New) A vehicle bumper mounted on a vehicle comprising:

a bumper reinforce;

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a hollow crash box having first and second ends, one of the first and second ends of the crash box being coupled to the bumper reinforce and the other of the first and second ends of the crash box being coupled to a vehicle body of the vehicle;

the hollow crash box including an initial buckling portion at which plastic deformation of the hollow crash box starts when the crash box receives a load, the initial buckling portion being formed before the vehicle bumper is mounted on the vehicle and being located closer to the first end of the hollow crash box than the second end of the hollow crash box with the start of plastic deformation of the hollow crash box occurring at a specific portion of the hollow crash box defined by the initial buckling portion and proceeding toward an adjacent portion of the hollow crash box.

13. (New) The bumper according to claim 12, wherein the bumper reinforce extends laterally relative to the vehicle, and wherein the crash box extends in a front-rear direction of the vehicle.

14. (New) The bumper according to claim 12, wherein the first end of the hollow crash box is coupled to the bumper reinforce.

15. (New) The bumper according to claim 12, wherein the initial buckling portion extends around the entire circumference of the hollow crash box.

16. (New) The bumper according to claim 12, wherein the initial buckling portion is devoid of holes passing through the hollow crash box.

17. (New) The bumper according to claim 12, wherein the hollow crash box includes at least one partition in an interior of the hollow crash box dividing the interior into a plurality of interior sections.

18. (New) The bumper according to claim 12, wherein the hollow crash box has a cross-section defined by a plurality of sides positioned so that pairs of the sides adjacent one another meet at a corner, the initial buckling portion extending across each corner.

19. (New) The bumper according to claim 12, wherein the initial buckling portion is a plastically deformed initial buckling portion that is plastically deformed before the vehicle bumper is mounted on the vehicle. --
